



EUROPEAN
COMMISSION

Community Research

EUROPEAN UNION CONTEST FOR YOUNG SCIENTISTS

Background Fact sheet no.2

Within a Wider Context

The fast pace of technological innovation worldwide means that research is a vital element in the ability of a country to compete in the global market place. Europe has a rich history of excellence in innovation but in order to compete on a global stage and to fully exploit its considerable advantages it needs to capitalise on the specific nature of its member states science and technology policies.

In March 2000 the Lisbon European Council agreed to establish the *European Research Area* (ERA) to co-ordinate these national research policies in the direction of shared objectives, expertise and resources. The setting up of the ERA has laid the foundation for a common science and technology policy across the European Union.

For the past two decades, the European Union, via its [Framework Programmes](#), has had a policy of supporting science and technology aimed essentially at encouraging co-operation between European research players.

The European Union also recognises the need to start the process of integration at the grass roots level. The Commission is actively supporting young people's interest in science and is promoting European cooperation in the fields of education, training and youth.

In order to meet the objective of the ERA - to coordinate national research policies in the direction of shared objectives, expertise and resources - the heads of state and government have confirmed a need to increase the global expenditure on research to 3% of GDP - or one and a half times the current level – by 2010.

This substantial increase will enable Europe to bridge the gap with the United States and Japan and help create a uniform concept of European Research similar to the Single European Market.

Creating Awareness

The European Union Contest for Young Scientists competition has been a useful tool in the development of a pan-European scientific community. Over the years it has generated excitement and has gone some way to popularising science among the young. Apart from the EUCYS the Directorate-General for Research has introduced several other initiatives to encourage young people into the sciences.

The **Descartes Prize** was established in 2000 as the major European science prize for outstanding collaborative research and is open to any scientific field. Its international dimension once again raises awareness of the scientific community and its work.

The Descartes Prize aims to encourage the best researchers and teams to become involved in and committed to European research, and to increase the visibility of outstanding research findings produced by European researchers. The prize recognises the collaborative nature of research that is at the heart of any major scientific breakthrough. In 2005, 76 multinational research teams are competing for the prestigious award.

Last year the European Commission introduced the **Descartes Prize for Science Communication**. The objective of this prize is to stimulate interest in scientific journalism and, in general, to improve the communicating of science to the public. Five leading personalities from the worlds of science and the media were selected from among 19 finalists in 2004 for their outstanding contribution to stimulating interest in science among the European public. More information on the Descartes prizes can be found on: <http://europa.eu.int/comm/research/descartes/>

Another well-known initiative is the **Marie Curie Actions**. The actions finance training and mobility activities for researchers and are aimed at the development and transfer of research competencies, the consolidation and widening of researchers' career prospects, and the promotion of excellence in European research. Eligibility for the various schemes is based on research experience and expertise, not age. All levels are covered from researchers at the start of their career to world-class researchers with well-established scientific expertise. The actions are also open to business, universities and institutions active in research.

Another opportunity that has been created is the **European Young Investigators (EURYI) Awards**, which is the initiative of 20 European Union Research Organisations from 16 countries and also contributes to the goals of the European Research Area.

The purpose of EURYI is to attract outstanding young researchers from anywhere in the world to work in Europe and lead their own research teams. Scientists submit proposals and if they are successful, they are given the resources to pursue an independent research career, and if appropriate, to establish and develop a research group. It encourages young researchers from all over the world to work in a European environment thus benefiting the development of European science and creating a platform for the next generation of leading European researchers.

From 21-25 November 2005, young people can take part in **European Science Week**. Science Week acts as a focal point for national science programmes. The event has grown and now has more activities in more cities around Europe than ever before. The aim of this initiative is to show young people that there is more to science than lab coats and formulas. Through its sponsorship of Science Week activities the European Commission is confident of forging closer ties between the world of science and the lives of European citizens. Activities have ranged from locally organised festivals, such as the Lower Silesian Science Festival in Poland, through to nation-wide celebrations like the Danish Science Festival and the German Science Days.

Another interesting EU project has been the establishment of independent research organisations known as **Science Shops**. The concept grew out from the student movement in the early 1970s when a group of Dutch chemistry students decided to put their heads together to help non-profit clients solve scientific problems. They work for the local community and carry out scientific research in a wide range of disciplines – usually free of charge – on behalf of citizens. The European Commission is currently examining a variety of new ways to strengthen and promote the role of science shops for young people. Over the past 30 years, science shops have spread across Europe and beyond to the USA, Canada, Israel, and South Africa.

In 2004, the Directorate-General for Research launched **Nucleus**, a major European science education initiative. A collaborative effort between 50 European science centres, top research institutions, universities and other organizations, Nucleus is designed to enhance science teaching in European Schools, thereby motivating children to pursue scientific careers.

The Nucleus programme is an integrated set of projects that link schools, laboratories, science centres, academia, national and international teaching festivals, a major web portal for science teaching resources, an international journal for science teachers, opportunities for training, and new methods for using science related films in the classroom. By bringing these elements together, Nucleus aims to bridge the gap between formal and informal education, cutting-edge research and the classroom.

Xplora, a web portal aimed at teachers, students, scientists, science communicators and science educators, is supported by one of the Nucleus projects. Operated by a network of 28 Ministries of Education across Europe, the portal provides members with a wealth of resources, including science education news, tips for teachers, innovative practical science approaches and projects, and a database of websites and digital learning resources for science education. Xplora also enables users to create online communities and join online discussions. More information on the Xplora initiative can be found on: <http://www.xplora.org/>

